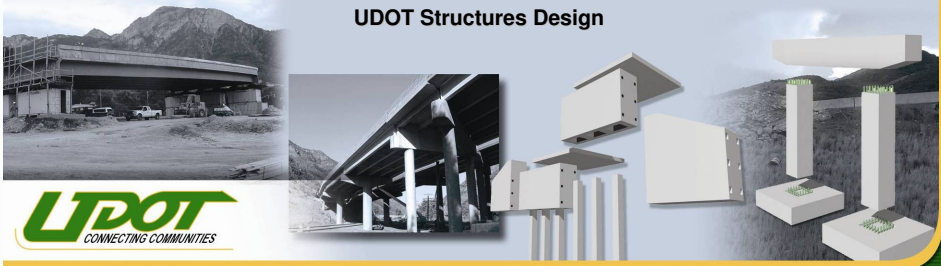


**UTAH**  
Department of Transportation  
**ACCELERATED**  
**BRIDGE CONSTRUCTION**  
PHASE II: PRELIMINARY DEVELOPMENT WORKSHOP

## UDOT ABC Overview


**Fred Doehring**  
UDOT Structures Design



**UDOT**  
CONNECTING COMMUNITIES

## Design Lessons Learned: Constructability

- Design details must be reviewed for constructability
- Consider utilities that may inhibit placement
- Design to accommodate limited space around existing structure



**UDOT**  
CONNECTING COMMUNITIES

## Design Lessons Learned: Constructability

- Review current topography for the ability to move equipment
- Design panels as similar as possible for ease of casting



## Design Lessons Learned: Phasing

- Establish a rapid fill method
- Sequence/schedule ABC activities appropriately for the most optimal usage of time
- Consider staging areas during the Right-of-Way acquisition process
- Must keep MOT as a major consideration
- Design for any required temporary work



## Design Lessons Learned: Placement

- Must have proper pick point design
  - Account for parapet
  - Determine if counterweights will be required
- Establish a design to minimize closure pours
- Ensure deck steel will handle moving stresses
- Clearly detail all connections



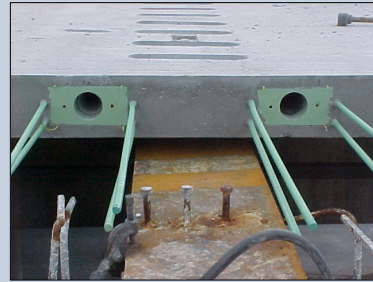
## Construction Lessons Learned: Initial Planning

- Communicate all requirements early on
- Activities should be sequenced/scheduled appropriately to optimize time and accelerate construction



## Construction Lessons Learned: Initial Planning

- Contractor should be familiar with new technologies or materials being used
- Adequate upfront time needs to be accounted for
  - Shop drawing approval
  - Casting
  - Full curing of all precast elements



## Construction Lessons Learned

- Contractor should survey the site prior to beginning construction
- Know conditions of the existing deck for appropriate removal plan
- Plan for space for all required equipment





## Completed Deck Panel Projects

- I-15 Reconstruct (1/2 Depth Deck Panels)



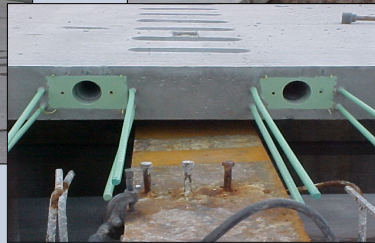
## Completed Deck Panel Projects

- I-80 Wanship



## Completed Deck Panel Projects

- I-215 over 3900 South (Post-Tensioned)



## Completed Deck Panel Projects

- 800 North over I-15



## Completed Deck Panel Projects

- Parish Lane over I-15



## Completed Deck Panel Projects

- I-80 Silver Creek





## Completed Deck Panel Projects

- I-84 Weber Canyon (3 Bridges)



## Deck Panel Projects Under Construction

- I-15 Kaysville Interchange (Widening)
  - 1/2 Depth Deck Panels
- I-80 Kimball Junction (Widening)
- US-6 MP 200 (2 Bridges)
- I-15 Bluff Street Interchange (Widening)
- Riverdale Road over I-84 (Widening)





Questions?

